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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/518,162 | 12/14/2004 | Erich Salzle | 18594-002US1 | 2738 |
| 20985 | 7590 | 07/24/2006 | EXAMINER | |
| FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | AHMED, SHAMIM | |
| | | ART UNIT | PAPER NUMBER | |
| | | 1765 | | |

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/518,162 | SALZLE ET AL. |
| | Examiner | Art Unit |
| | Shamim Ahmed | 1765 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 December 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 10-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12-14-04</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10-14 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Nelson (USP 3,560,281).

Nelson discloses a glass etching process including the step of controlling the concentration of hexafluorosilicate in the glass-etching bath containing hydrofluoric acid and sulfuric acid (col.2, lines 40-49).

Nelson also discloses that inorganic sulphate salt such as aluminum sulphate is added into the etching bath in order to precipitated hexafluorosilicate for reduction of the concentration of the hexafluorosilicate, wherein the added aluminum sulfate concentration falls within the claimed range (col.2, lines 50-68).

As to claim 11, the zinc ions are inherent in the composition as the ingredient of the glass substrate.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (3,560,281) in view of JP 2000-147474 A.

Nelson discusses above in the paragraph 2 but fail to teach introduction of air as blowing into the bath.

However, JP-2000-147474 A teaches glass etching is provided with air bubble generator in the bottom of the etching tank for stirring the etching solution in order to provide uniform etching on the glass surface (see abstract).

Therefore, it would have been obvious to one of ordinary skilled in the art at the time of claimed invention to employ the teaching of the Japanese reference for uniform etching of the glass substrate as taught by the Japanese reference.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (3,560,281) in view of Salzle (USP 4,555,304).

Nelson discusses above in the paragraph 2 but fail to teach introduction of oxalic acid and/or potassium oxalate in the etching/polishing bath.

However, Salzle teaches introduction of oxalic acid into glass polishing or etching bath with advantage of high polishing speed (see abstract).

Therefore, it would have been obvious to one of ordinary skilled in the art at the time of claimed invention to employ the teaching of Salzle into Nelson's process for increasing the polishing/etching speed as taught by Salzle.

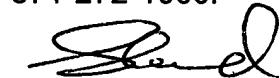
Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Haga et al (US 2002/0072235 A) teaches conventional teaching for controlling glass etching rate by varying hexafluorosilicate concentration.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shamim Ahmed whose telephone number is (571) 272-1457. The examiner can normally be reached on M-Thu (7:00-5:30) Every Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine G. Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Shamim Ahmed
Primary Examiner
Art Unit 1765

SA
July 19, 2006